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STUDIES ON *MIKANIA* (COMPOSITAE: EUPATORIEAE) – XVII: TWO NEW SPECIES FROM MINAS GERAIS, BRAZIL

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ABSTRACT

Mikania citriodora and **Mikania hartbergii**, two new species from the Serra do Espinhaço, Minas Gerais, Brazil, are described and illustrated.

KEY WORDS: Compositae, Eupatorieae, *Mikania*, Minas Gerais, Brazil

Continued study of the genus *Mikania* has resulted in the recognition of the following new species from the Serra do Espinhaço, Grão Mogol, Minas Gerais, Brazil, an area characterized by a high rate of endemism.

Mikania citriodora W. Holmes, *sp. nov.* (Figure 1). TYPE: BRAZIL. Minas Gerais: Serra do Espinhaço, Grão Mogol, ca. 2 km from center of town via Vila Nova, 950 m; sandy soil over sandstone; common, 12 Jun 1990, *W.C. Holmes 5064* (HOLOTYPE: MBM; Isotypes: BAYLU, IBE, NLU, TEX).

Species ad *Mikaniam rufescem* Schultz-Bip. similis sed differt planta tomentosa (non glabra) et foliis crenato-dentatis (non integris).

Herbaceous to semiwoody sprawling to twining vines growing from elongated knotty caudices; stems terete, glabrate (at bases) to tomentose (upper parts); internodes to 20 cm long. Leaf blades ovate to ovate deltate, 2.2-4.0 x 1.3-4.0 cm, apices obtuse to rounded, margins crenate-dentate, bases obtuse to truncate to an acute insertion at the petioles, trinervate from near the base, surfaces tomentose, spotted with glandular resinous dots; petioles 1.0-1.3 cm long, tomentose. Capitulescences corymbose, 3-6 x 5-8 cm; branchlets terete, tomentose; bracts ovate, 0.8-1.7 x 1-2 cm, tomentose; ultimate

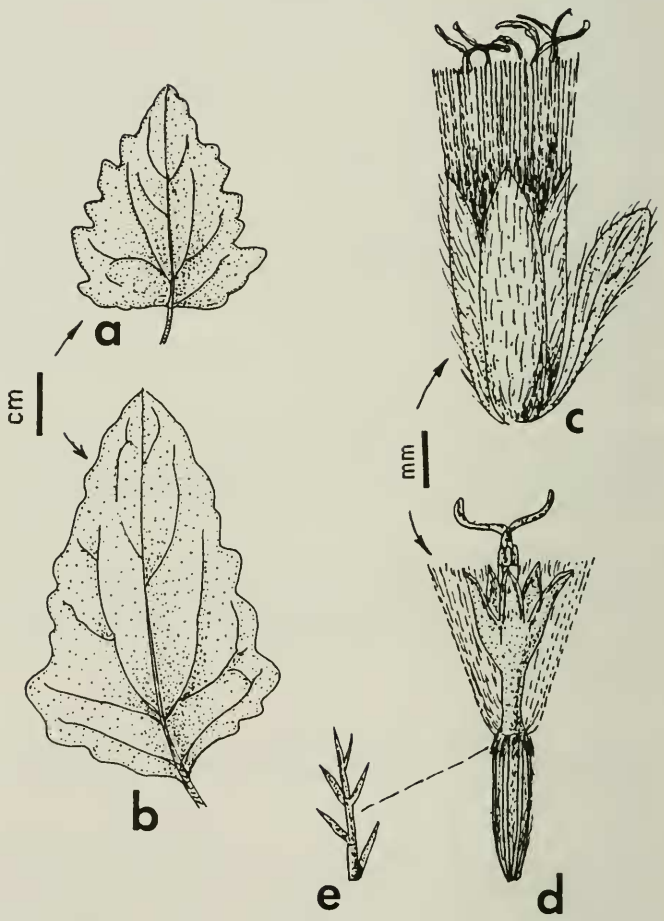

Figure 1. *Mikania citriodora* W. Holmes. A and B. leaves; C. head with phyllaries and subinvolucral bract; D. flower and achene; and E. branched trichome from upper part of achene.

branchlets 1.5-5.0 mm, tomentose. Heads 8-10 mm long; subinvolucral bracts oblanceolate to elliptic, 4-6 mm long, apices acute, surfaces pilose to tomentose. Phyllaries elliptic-oblong, 5.5-7.0 mm long, apices acute, surfaces pilose to tomentose. Corollas 3.8-5.0 mm long, creamy white, tubes 1.7-2.5 mm long, throats funnelform to semicampanulate, ca. 1 mm long, teeth ovate, triangular to triangular ovate, 1.1-1.5 mm long. Achenes 2.6-3.5 mm long, 7 ribbed, the ribs upwardly scabrid, surfaces olivaceous, pilose (to tomentose at the summit) with branched trichomes. Pappus bristles 5.0-5.5 mm long, white, 40-50, the margins scabrid.

PARATYPE: BRAZIL. Minas Gerais: Serra do Espinhaço, Grão Mogol, mountains to the west of town; 1170 m, sand over sandstone; common, 14 Jun 1990, *W.C. Holmes 5070* (BAYLU, IBE, MBM, NLU, TEX).

Mikania citriodora W. Holmes has several very unusual characteristics for the genus. The injured fresh stem has a faint smell of lemon, hence the specific name. While most species of *Mikania* have five ribbed achenes, the new species has achenes with seven ribs. Several species of erect *Mikania*, formerly included in the segregate genus *Kanimia*, are reported to have ten angled achenes. Certainly the most interesting trait is the presence of multicellular branched trichomes on the achenes, a trait not known in other *Mikania*. Typically, *Mikania* have multicellular, prominently jointed, but unbranched trichomes.

This is one of the few *Mikania* species reported to be aromatic. Others include *M. anisodora* Hassler, of Paraguay and Paraná, Brazil, the fresh foliage reportedly having an anise odor (Hassler 1915) and *M. aromatica* Oersted (Scharling & Oersted 1863), a Brazilian plant described as having the odor of cumin. The latter name is a synonym of *M. smilicina* DC.

Mikania hartbergii W. Holmes, *sp. nov.* (Figure 2). TYPE: BRAZIL. Minas Gerais: Serra do Espinhaço, Grão Mogol, mountains to the west of town, 1250 m, 14 Jun 1990, *W.C. Holmes 5071* (HOLOTYPE: MBM; Isotypes: BAYLU, IBE, NLU, TEX).

Species ad *Mikaniam neurocaulum* DC. similis sed differt caulibus teretibus (non profunde sulcatis) et foliis brevissime petiolatis (non longe petiolatis).

Erect to ascending suffrutescent herbs, 0.5-1.7 m tall, single to multistemmed from knotty rootstocks; stems terete, velutinous, ca. 1 cm in diameter at the base; internodes 2.0-3.5 cm long. Leaf blades ovate, 2.2-4.6 x 1.7-3.2 cm, semicoriaceous, apices acute to a mucronate point, margins entire to denticulate, often revolute, bases truncate to subcordate, venation subpinnate with 2 pairs of secondary nerves separating from the midvein within the lower 8 mm of the blade; upper surfaces hirsute to pilose, prominently reticulate,

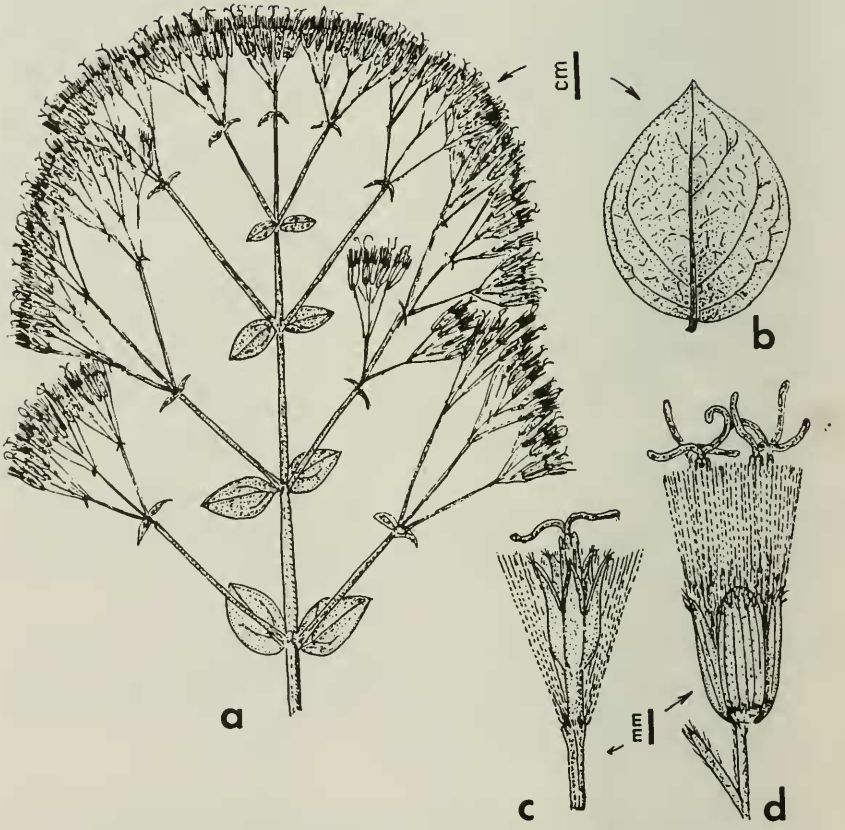

Figure 2. *Mikania hartbergii* W. Holmes. A capitulescence; B. leaf; C. flower and achene; D. head with phyllaries and subinvolucral bract.

lower surfaces velutinous to pilose, reticulate; petioles 1.0-2.5 mm long, velutinous. Capitulescences thyrsoid corymbs, 9-15 x 11-15 cm, the heads ultimately disposed in ternately branching and congested corymbs 1.0-1.5 x 1.5-3.0 cm; branchlets terete, velutinous; bracts similar to leaves but reduced in size; ultimate branchlets 0.5-3.5 mm long. Heads 6-8 mm long; subinvolucral bracts linear, 2.0-3.5 mm long, pilose especially on the apices and margins. Phyllaries ovate-oblong, ca. 3.8 mm long, apices rounded, ciliate-pilose, margins ciliate, surface glabrate to remotely puberulent; bases slightly calcarate. Corollas white, 4.8-5.2 mm long, tubes 1.6-1.7 mm long, throats funnelform to semicampanulate, 1.5-2.0 mm long, teeth lance-ovate, 1.2-1.5 mm long, sparingly pilose at the apices. Achenes (immature) ca. 1.8 mm long. Pappus bristles ca. 6 mm long, white, 35-40, margins scabrid, apices slightly thickened.

PARATYPE: BRAZIL. Minas Gerais: Serra do Espinhaço, Grão Mogol, mountains to the west of town, 1030 m, 14 Jun 1990, *W.C. Holmes 5068* (BAYLU, IBE, MBM, NLU, TEX).

The new erect to ascending species of *Mikania* is known only from the Serra do Espinhaço near Grão Mogol. Several colonies of about 10-12 plants were observed from 1030 to 1250 m altitude, but specimens were collected only from the two colonies that possessed mature flowers. Plants were usually rooted in dry, sandy crevices in sandstone.

The species appears closely related to *Mikania neurocaula* DC., but can be distinguished by its terete stems, truncate to subcordate leaf bases, and subsessile to very shortly pedicellate leaves. *Mikania neurocaula* is described as having profoundly sulcate stems, acute leaf bases, and leaves with petioles of about 1.5 cm long.

It is a pleasure to name this species for W. Keith Hartberg, Professor and Chairman of the Biology Department of Baylor University.

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